

## CLAIMS

I claim:

1. A method for imparting a spectral characteristic to a composite material, comprising the steps:

- 5           (a) providing a reinforcement material,
- (b) coating the reinforcement material with pigment particles to produce a pigment coated reinforcement material,
- (c) applying a resin material to the pigment coated reinforcement material, and
- (d) curing the resin material to form the finished composite material comprising a
- 10           matrix that binds the reinforcement material,

wherein the matrix material provides durability to the pigment particles coating the reinforcement material, and wherein the pigment particles impart the spectral characteristic to the composite material.

2. The method of claim 1, wherein a fluidized bed of the pigment particles is used in the

15 step of coating the reinforcement material with pigment particles.

3. The method of claim 1, further comprising applying a textured tool surface to the pigment coated reinforcement material.

4. The method of claim 2, further comprising applying a textured tool surface to the pigment coated reinforcement material.

5. The method of claim 2, further comprising sanding a surface of the finished composite material.

6. The method of claim 1, wherein the reinforcement material is selected from the group consisting of glass, carbon, Spectra, and Kevlar.

5 7. The method of claim 1, wherein the pigment is selected from the group consisting of metal flakes, inks, dyes, and pigment-coated microspheres.

8. The method of claim 1, wherein the resin is selected from the group consisting of vinyl ester resins and epoxy resins.

9. A method for imparting a spectral characteristic to a composite material, comprising the  
10 steps:

- (a) providing a reinforcement material,
- (b) applying a resin material to the reinforcement material,
- (c) partially curing the resin material to B-stage to form a partially cured resin material that binds the reinforcement material and has a tacky surface,
- 15 (d) coating the tacky surface of the partially cured resin material with pigment particles to produce a pigment coated partially cured resin material, and
- (e) curing the pigment coated partially cured resin material to form a finished composite material comprising a matrix material that binds the reinforcement material,

wherein the matrix material provides durability to the pigment particles coating the reinforcement material, and wherein the pigment particles impart the spectral characteristic to the composite material.

10. The method of claim 9, wherein a fluidized bed of the pigment particles is used in the  
5 step of coating the tacky surface of the partially cured resin material with pigment particles.

11. The method of claim 9, further comprising applying a textured tool surface to the pigment coated partially cured resin material.

12. The method of claim 10, further comprising applying a textured tool surface to the pigment coated partially cured resin material.

10 13. The method of claim 10, further comprising sanding a surface of the finished composite material.

14. The method of claim 9, wherein the reinforcement material is selected from the group consisting of glass, carbon, Spectra, and Kevlar.

15 15. The method of claim 9, wherein the pigment is selected from the group consisting of metal flakes, inks, dyes, and pigment-coated microspheres.

16. The method of claim 9, wherein the resin is selected from the group consisting of vinyl ester resins and epoxy resins.

17. A composite material with a spectral characteristic comprising:

(a) a reinforcement material,

(b) a layer of pigment particles, and

(c) a layer of resin material;

wherein the layer of pigment particles is applied in a fluidized bed of pigment particles, and the resin material is cured to form a matrix that binds the reinforcement material and provides  
5 durability to the layer of pigment particles, and wherein the pigment particles impart the spectral characteristic to the composite material.

18. The composite material of claim 17, wherein the layer of resin material is applied to the reinforcement material, and the layer of pigment particles is applied to the layer of resin material.

19. The composite material of claim 17, wherein the layer of pigment particles is applied to  
10 the reinforcement material, and the layer of resin material is applied to the pigment particle coated reinforcement material.

20. The composite material of claim 18, wherein a textured tool surface is applied to the layers of pigment and resin before the resin is cured.

21. The composite material of claim 19, wherein a textured tool surface is applied to the  
15 layers of pigment and resin before the resin is cured.